Tuesday, 1/23/2007 7:31:15 AM Date: Kim Johnston ¿ User: **Process Sheet** : TUBE ASSEMBLY Customer **Drawing Name** : CU-DAR001 Dart Helicopters Services Job Number : 30374 : 10923 **Estimate Number** · NIA : D2003043 **Part Number** P.O. Number CB 07.01.23 · UNDER REVIEW S.O. No. : NA : 1/23/2007 **Drawing Number** This Issue : N/A Prsht Rev. **Project Number** : SMALL /MED FAB : B First Issue **Drawing Revision** :NIA : 25258 Material **Previous Run** : 2/5/2007 Qty: 5 Um: Each **Due Date** Written By Checked & Approved By : Est. Comment **Additional Product** Job Number: Description: **Machine Or Operation:** Seq. #: DOCUMENT CONTROL 1.0 Comment: DOCUMENT CONTROL Photocopy bluefile & type labels per PPP D2003-043 304 RD Tube .500 x .035W 2.0 M304TR0500W035 4.7030 f(s) Comment: Qty.: 0.9406 f(s)/Unit Total: Batch: m102 742. Material:1/2"Æ x 0.035" wall AISI 304 SS tubing 3.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1 Comment: SMALL & MEDIUM FAB RESOURCE 1 1-Form tube as per template D2003-043 4.0 QC5 Comment: INSPECT WORK TO CURRENT STEP M26506 Firesleeve-crkl .375IDia 5.0 Comment: Qty.: 5.1188 f(s) 1.0238 f(s)/Unit Total: Batch:<u>m103</u>232 Material: M2650-6 Heat sleeve MS208198J Sleeve 6.0 Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s) Pick: **Qty Part Number** Description Batch M103/16 2 MS20819-8J Sleeve

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W/O:		WORK ORDER CHANGES												
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector							
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Part No:	_ PAR #:	Fault Category:	NCR: Yes No	DQA:	Date: <u>07/03/09</u>
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)											
_		Description of NC		Corrective Action Section B		Verification	Annroval	Annroval					
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector					
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NOTE: Date & initial all entries

Tuesday, 1/23/2007 7:31:15 AM Date: User: Kim Johnston **Process Sheet** Drawing Name: TUBE ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Job Number: 30374 Part Number: D2003043 Job Number: Seq. #: Machine Or Operation: Description: Nut AN8188J 7.0 Total: 10.0000 Each(s) Comment: Qty.: 2.0000 Each(s)/Unit Pick: **Qty Part Number** Description Batch MICHIS 9 2 AN818-8J Nut 8.0 D2182 Heat Shrink Comment: Qty.: Total: 1.8750 f(s) 0.3750 f(s)/Unit Pick: Description **Qty Part Number** Batch 26009 1 D2182-045 Heat shrink SMALL & MEDIUM FAB RESOURCE 1 SMALL FAB 1 9.0 07-01-31 Comment: SMALL & MEDIUM FAB RESOURCE 1 1-Cut as per template D2003-043 (10.75" long) 07 - 01-31 2-Cut: 11.7" long as per Dwg D2003 07-61-31 3-Assemble as per Dwg D2003 INSPECT WORK TO CURRENT STEP 10.0 QC5 Comment: INSPECT WORK TO CURRENT STEP PACKAGING RESOURCE #1 11.0 PACKAGING 1 Comment: PACKAGING RESOURCE #1 Identify and Stock Location: 12.0 QC21 Comment: FINAL INSPECTION/W/O RELEASE 1 07.02.02 Job Completion

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W/O:		WORK ORDER CHANGES											
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Part No:	PAR #:	_ Fault Category:	NCR: Yes No	DQA:	Date:
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)											
		Description of NC		Corrective Action Section B	Verification	Approval	Approval						
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto					
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NOTE: Date & initial all entries





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1	15	4	D2003 SHEET 1 OF 2
DATE	7		TITLE SCALE
 99.0	06.08		206 CABIN HEATER TUBE ASSEMBLIES NTS
A		90.04.09	NEW ISSUE
В		99.06.08	UPDATE PER TEMPLATES; ADD P/N'S; 0.025 TUBING NOW 0.035 (TSR1049)

NOTE: FLAT LENGTHS MAY BE INCORRECT. BEND TO BENT TOOL. REPORT TO ENGINEERING

CB DADER REVIEW

me flot 06.12.13 04.08.21 CB Ically wrong

ON CORR	ECT FLAT	HEATSLEEVE 7	CUT LENGTH # OF TUBE ²	MS20819-8J SLEEVE	AN818-8.3 NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-6D SLEEVE	AN818-6D NUT	DESC.	MATERIAL ⁴⁶⁷⁷	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00	+		****		2	2		6061-T6 0.375 OD x 0.035 W	
D2003-001	T2003-001	7.3	8.12	1		-		2	2		6061-T6 0.375 OD x 0.035 W	WW-T-700/6 WW-T-700/6
D2003-005	T2003-005	9.8	10,62	 		 		2	2		6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-003	T2003-003	20.0	19.63	-				2	2		6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-007	T2003-007	12.38	12.44	-				2	2		6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-009	T2003-005	33,31	32.38	 	-			2	2		6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-011	T2003-011	12.7	13.54	+	-			2	2		6061-T6 0.375 OD x 0.035 W	
D2003-015	T2003-015	17.2	18.00	-		-		2	2		6061-T6 0.375 OD x 0.035 W	WW-T-700/6 WW-T-700/6
D2003-015	T2003-015	17.0	16.25	 				2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-017	T2003-017	9.8	10.62	-		2	2	- 4	-4	TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-019	T2003-019	N/A	2.25	<u> </u>		2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-021	T2003-021	4.5	5.33	-		2	2	,		TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	
D2003-025	T2003-025	9.8	10.60		-	2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-025	T2003-027	7.25	7.38	-		2	2	-		TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-027	T2003-027	17.2	18.00	+		2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
	T2003-029	14.6	15.38	2	2	- 4				TUBE ASS'Y	CRES 0.500 OD x 0.035 W	WW-T-700/6
D2003-031 D2003-033	T2003-031	29.75	29.62	2	2	-		-		TUBE ASS'Y		AISI 304
	T2003-035	24.7	27.00	2	2						CRES 0.500 OD x 0.035 W	AISI 304
D2003-035				2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-037	T2003-037	24.81	23.38		2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-039	T2003-039	34.0 6.0	34.00 5.88	2	2	-				TUBE ASS'Y	CRES 0.500 OD x 0.035 W CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041									TUBE ASS'Y		AISI 304
D2003-043	T2003-043	11.7 3.50	10.75 2.44	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045 T2003-047	5.56	5.56	2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-047 D2003-049	T2003-047	33.2	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-077	N/A	6.25					1	1	JET	6061-T6 0.375 OD x 0.035 W	AISI 304 WW-T-700/6
D2003-077	T2003-101	13.25	13.13	1				2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-101	T2003-101	12.38	12.00	+				2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-105	T2003-105	10.75	10.60	1				2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-103	T2003-107	12.75	12.25	1		3		2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-107	T2003-107	8.25	8.125	1		2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-111	T2003-111	4.75	4.625	+ -		2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WV-T-600/6
D2003-116	T2003-116	4.0								HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-14	4.0		1						HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-14	T2003-16	4.0		1				,		HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-205	T2003-205	9.75	9.60	 				2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-207	T2003-207	3.75	3.75	1		-		2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035-W/T	
				†							SHOT CON	1 1770-1-700/0
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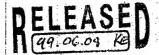
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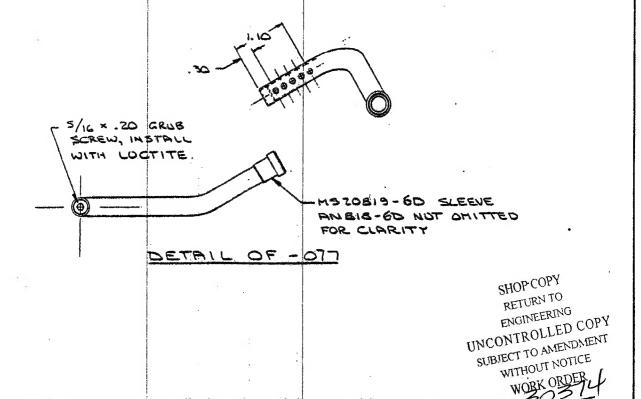
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Ì	DATE		TITLE	SCALE
	99.06.08		206 CABIN HEATER TUBE	ASSEMBLIES NTS



OG.08 27 (B) Some flat lengths

Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



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